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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/537,457	11/22/2005	Masahide Hayama	4777-64	2663
29540	7590	08/15/2006	EXAMINER	
PITNEY HARDIN LLP 7 TIMES SQUARE NEW YORK, NY 10036-7311			PHAM, TUAN	
			ART UNIT	PAPER NUMBER
			2618	
DATE MAILED: 08/15/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/537,457	Applicant(s) HAYAMA ET AL.	
	Examiner TUAN A. PHAM	Art Unit 2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. **Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Admitted Prior Art, hereinafter, "APA" in view of Martinez (U.S. Patent No.: 7,039,359).**

Regarding claim 1, APA teaches an interrogator comprising (see figure 2):

a carrier oscillator connected to a transmitting mixer (see figure 2, carrier oscillator 202, mixer 203),

a receiver unit (see figure 2, receiving unit 207), and

an receiving high-frequency amplifier for amplifying the receiving high-frequency received by said receiver unit (see figure 2, receiving high-frequency amplifier 208).

It should be noticed that APA fails to teach carrier generated by the carrier oscillator is interference-inputted to the receiving high-frequency amplifier, thereby modulating the receiving high-frequency. However, Martinez teaches carrier generated by the carrier oscillator (see figure 2, the coupler 72 is included a LO) is interference-inputted to the receiving high-frequency amplifier (see figure 2, LNA 93, 95, col.8, ln.1-63), thereby modulating the receiving high-frequency (col.8, ln.1-63).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Martinez into view of APA in order to minimize the noise in both the transmitted and received signal paths as suggested by Martinez at col.1, ln.40-47.

Regarding claim 2, Martinez further teaches said receiving high-frequency amplifier, said carrier oscillator, and said transmitting mixer are provided on an identical printed-circuit board, and said carrier oscillator is arranged between said receiving high-frequency amplifier and said transmitting mixer (see figure 2, the coupler 72 is included a LO, amplifier 94, 92, col.8, ln.1-63).

Regarding claim 3, Martinez further teaches said carrier oscillator and said receiving high-frequency amplifier are arranged in an identical shield section (see figure 2, the coupler 72 is included a LO, amplifier 94, 92, col.8, ln.1-63).

Regarding claim 4, Martinez further teaches the interference-input from said carrier oscillator to said receiving high-frequency amplifier is executed by loose-coupling an antenna of the transmitter unit and an antenna of said receiver unit (see figure 2, coupler 72 is included LO, col.8, ln.1-63).

4. Claims 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Admitted Prior Art, hereinafter, "APA" in view of Martinez (U.S. Patent No.: 7,039,359) as applied to claim 1 above, and further in view of Baskin (U.S. Patent No.: 6,087,898).

Regarding claim 5, APA and Martinez, in combination, disclosed invention but fails to disclose the coupler has a capacitor of low capacitance. However, Baskin teaches such features (see figure 1, coupler 1, col.9, ln.15-45).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Baskin into view of APA and Martinez in order to minimize the noise in both the transmitted and received signal paths as suggested by Martinez at col.1, ln.40-47.

Regarding claim 6, Martinez further teaches mutual induction of transmission lines, which are parallel to each other (see figure 1, col.9, ln.15-45).

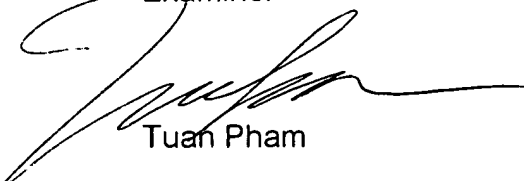
Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan A. Pham whose telephone number is (571) 272-8097. The examiner can normally be reached on Monday through Friday, 8:30 AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Anderson can be reached on (571) 272-4177. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have question on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Art Unit 2618
August 11, 2006
Examiner



Tuan Pham

Supervisory Patent Examiner
Technology Center 2600



Matthew Anderson